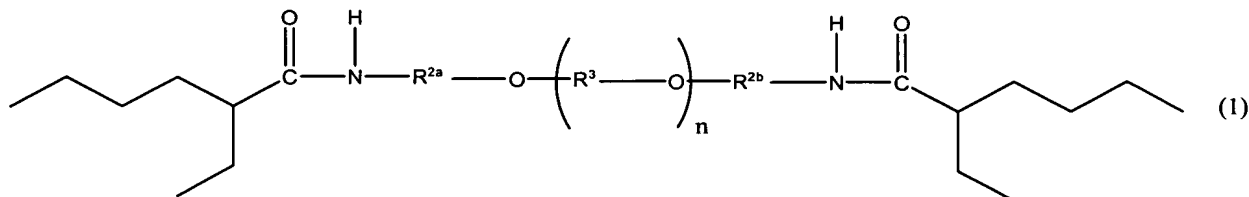


REQUEST FOR RECONSIDERATION

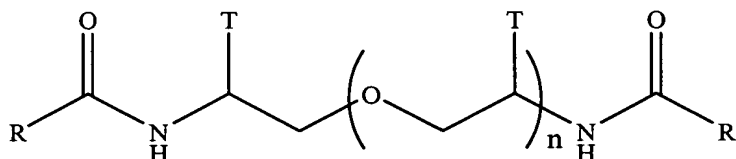
The claimed invention is directed to a diamide compound and a composition for external application comprising a diamide compound of the structure



The rejection of claim 14 under 35 U.S.C. § 103(a) over Robbins et al. U.S. 4,626,429 is respectfully traversed.

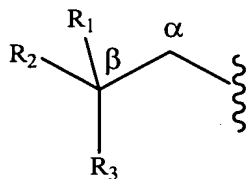
A diamide compound as claimed is nowhere disclosed or suggested in the cited prior art reference.

The examiner cites the disclosure of Robbins at column 6, lines 1-5 as suggestive of the claimed diamide compound. The disclosure at column 6 identifies a polyamine of a generic formula,



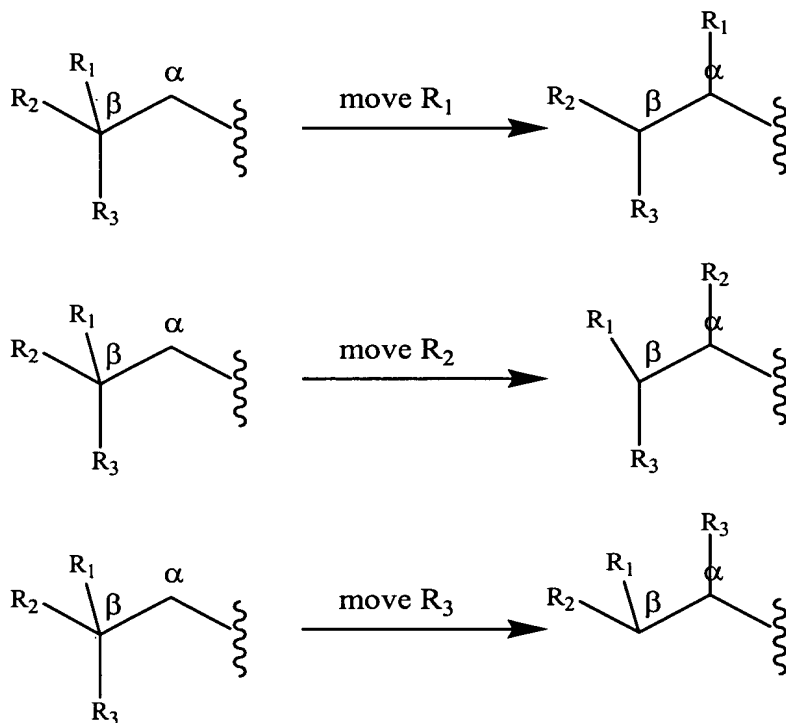
where the end groups R are **neoalkyl** groups of 4 to 13 carbon atoms.

A neoalkyl group has a structure



where the β position is substituted with three alkyl groups, as evidenced by the attached passage from the Aldrich catalogue, with reference to the entry for neopentyl alcohol, the trivial name for 2,2-dimethyl-1-propanol. Accordingly a neopenyl group has an **unsubstituted** methylene group at the α position and **three substitutions** at the β position.

In contrast, the claimed diamine compound is **substituted** at the α position, featuring a branching ethyl group and only **one substitution** at the β position. Thus the claimed diamide compound is not a positional isomer of the neoalkyl compound of Robbins as merely moving any of the alkyl groups R_1 , R_2 or R_3 from the β position to the α position would not provide the claimed structure.



In no case does moving the position of one of the alkyl groups at the β to the α position provide for a branched alkyl group as claimed.

The question of "structural similarity" in chemical patent cases has generated a body of patent law, in which recognized categories of structural similarity give rise to, without more, a *prima facie* case of obviousness. Such recognized categories include tri-ortho esters and tetra-orthoesters, stereo isomers, adjacent homologs and structural isomers and acid and ethyl esters (*In re Jones*, 21 USPQ2d 1941, 1943 Fed. Cir. (1992)). None of these type of structural similarities are involved in the present case. Moreover, generalization is to be avoided insofar as specific structures are alleged to be *prima facie* obvious one from the other (*In re Grabiak*, 226 USPQ 870, 872 (Fed. Cir. 1985)).

Moreover, there is no motivation provided by the cited reference to provide anything but a neoalkyl group as the end groups. The reference specifically identifies that the end

group must be a neoalkyl group, specifying that the best hair conditioners are prepared from neodecanoic acid (column 6, lines 41-43). Accordingly, as the reference identifies a genus of neoalkyl group, which does not encompass the claimed diamide compound and identifies a specific diamide compound as the best for hair conditioners, there is no motivation to use an endgroup which is not a neoalkyl group.

“There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art.” *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998)

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)

A statement that modifications of the prior art to meet the claimed invention would have been “ ‘well within the ordinary skill of the art at the time the claimed invention was made’ ” because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993).

How can it be obvious to use an end group which is not a neoalkyl group, when the reference identifies a specific neoalkyl group which is best for hair conditioner compositions? It simply would not be obvious to provide a diamide as claimed as the cited reference identifies structurally different compounds as being best.

Applicants note that all of the claims recite a specific diamide compound structure having a substituted methylene group at the α and only one alkyl substitution at the β position.

In view of the deficiencies of the cited reference, the claimed invention is not rendered obvious and withdrawal of the rejection under 35 U.S.C. § 103(a) is respectfully requested.

The rejection of claim 14 under 35 U.S.C. § 112, second paragraph is respectfully traversed.

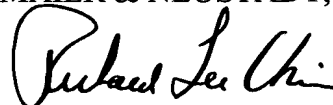
Applicants respectfully submit that claim 14 is sufficiently clear to those of ordinary skill in the art such that the metes and bounds of the claimed invention are clear. As correctly noted by the examiner claim 14, which limits the coefficient "n" to an average value of 1.7, describe a mixture of specific compound where "n" may be different integers, such that the average of the values "n" is 1.7. None the less, the metes and bound of the claim are clear to those of skill in the art as those of skill in the art can easily tell when this claim parameter is being met.

Evidence that those of ordinary skill in the art would understand the metes and bounds of the claims is found in the cited reference of Robbins et al, wherein claim 13 identifies a polyamide of a formula, where the variables x, y and z average about 5.3. Use of such an "average" value in describing a hair care conditioning compound is clearly definite as the same appears in the issued U.S. patent cited by the examiner of obviousness. In view of the demonstration of the conventional use of this terminology, withdrawal of this ground of rejection is respectfully requested.

Applicants submit that this application is now in condition for allowance and early notification of such action is earnestly solicited.

Respectfully submitted,

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